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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/523,502

02/02/2005

Eduard Michel

2002DE124

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04/04/2008

CLARIANT CORPORATION
INTELLECTUAL PROPERTY DEPARTMENT
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EXAMINER

BURNEY, RACHEL L

ART UNIT

PAPER NUMBER

1795

MAIL DATE

DELIVERY MODE

04/04/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/523,502	Applicant(s) MICHEL ET AL.	
	Examiner Rachel L. Burney	Art Unit 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 7-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 7-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

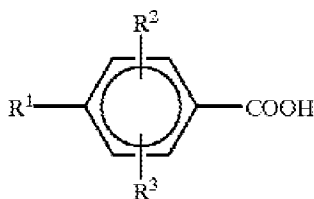
1. In view of the amendments filed, US 5401809 and US 6353049 have been considered.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-3 and 7-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6207335, Michel et al. in view of Japanese patent 2003-162145, Saiki et al. US PGPub 2003/0215731, Saiki et al. is used as an English translation of the Japanese patent.

With respect to claims 1, 3, 7, and 14, Michel discloses a process for controlling the charge of an electrophotographic toner by adding a control agent to the toner wherein the charge control agent comprises an alkali metal salt which comprises the acid of the formula:



wherein R¹ is a linear or branched alkyl radical with 1 to 18 carbon atoms, R² and R³ are C1-C8-alkyl or C1-C4-alkoxy (column 4, line 47 – column 6, line 8).

Michel discloses that it is possible to employ the metal cations directly in the form of their hydroxides (hydroxide salts) (column 8, lines 52-54). Michel further discloses that the salts can comprise divalent and trivalent metal cations (column 7, lines 37-38). The formula for the salts of Michel are substantially similar to those of the instant application, and therefore the compositions would have substantially similar characteristics, such as being a double hydroxide salt having about 1.8 to about 2.2 times as many hydroxyl groups as metal cations. Michel fails to teach the use of a hydrotalcite. Saiki teaches that commonly used charge control agents include hydrotalcite compounds (PP 0434). It would have been obvious to one of ordinary skill in the art at the time of the invention to use any commonly used charge control agents in the process of Michel, including hydrotalcite compounds, as taught by Saiki.

With respect to claim 2, Michel and Saiki disclose the process of claim 1 as discussed above, wherein the organic anions is 4-tert-butylbenzoic acid (Michel, column 15, line 46).

With respect to claim 8, Michel and Saiki disclose the process of claim 1 as discussed above, wherein the addition step further comprises adding a further

charge control agent selected from the group consisting of triphenylmethanes, ammonium and immonium compounds, fluorinated ammonium compounds, fluorinated immonium compounds, biscationic acid amines, polymeric ammonium compounds, diallylammonium compounds, aryl sulfide derivatives, phenol derivates, phosphonium compounds, fluorinated phosphonium compounds, calyx(n)arenas, cyclically linked oligosaccharides, derivatives of cyclically linked oligosaccharides, boric ester derivatives, interpolyelectrolyte complexes, polyester salts, benzimidazolones, azines, thiazines, and oxazines (Michel, column 14, lines 41-51).

With respect to claims 9 and 10, Michel and Saiki disclose the process of claim 1 as discussed above, wherein the electrophotographic toner contains 0.01 to 50% by weight of a binder (Michel, column 15, lines 12-15), 0.01-50% by weight of the charge control agent, hydroxide salt as shown in claim 1, (Michel, column 14, lines 35-40), and 1-10% by weight of a colorant (Michel, column 15, lines 22-24).

With respect to claim 11, Michel and Saiki disclose the process of claim 1 as discussed above, wherein the divalent metal cations are selected from the group consisting of Mg^{2+} , Ca^{2+} , Zn^{2+} , Co^{2+} , Cu^{2+} , and Mn^{2+} (Michel, column 8, lines 41-42).

With respect to claim 12, Michel and Saiki disclose the process of claim 1 as discussed above, wherein the trivalent metal cations are selected from the group consisting of Al^{3+} , Fe^{3+} , Co^{3+} , and Mn^{3+} (Michel, column 8, lines 43-44).

With respect to claim 13, Michel and Saiki disclose the process of claim 8 as discussed above, wherein the metal carboxylate (complex) comprises salicylate (Michel, column 13, lines 17-28).

4. Claims 5, 6, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6207335, Michel et al. in view of Japanese patent 2003-162145, Saiki et al. as applied to claim 1 above, and further in view of US Patent 5360859, Ogawa et al. Michel and Saiki disclose the process of claim 1 as discussed above, wherein the hydroxide salt may contain Mg^{2+} and Al^{3+} (Michel, column 8, lines 42-43), but does not give a specific example of a hydroxide salt with both cations. Ogawa teaches complex hydroxide salts which have excellent electrical insulation, which may be a hydrotalcite having Mg/Al in a ratio from 2-2.5 (column 2, lines 15-26). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a hydrotalcite having Mg/Al in a ratio from 2-2.5, as taught by Ogawa, in the process of Michel to optimize the electrical insulation.

5. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6207335, Michel et al. in view of Japanese patent 2003-162145, Saiki et al. as applied to claim 8 above, and further in view of US PGPub 2002/0098435, Rohr et al. Michel and Saiki disclose the process of claim 8 as discussed above, but fail to teach the use of boron ester derivatives as the charge control agent. Rohr discloses a toner comprising a charge control agent (PP 0016), wherein the charge control agents may

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be triphenylmethanes or boron ester derivatives of cyclically linked oligosaccharides (PP 0059). It would have been obvious to one of ordinary skill in the art at the time of the invention to use boron ester derivatives of cyclically linked oligosaccharides as a charge control agent instead of the triphenylmethanes of Saiki because Rohr teaches that they are functional equivalents and one would have a reasonable expectation of success in doing so.

Response to Arguments

Information Disclosure Statement

6. In view of the arguments filed 01/09/2008, the objections to the IDS have been withdrawn.

Claim Objections

7. In view of the amendments to the claims filed 01/09/2008, the objections to the claims have been withdrawn.

Claim Rejections - 35 USC § 112

8. In view of the amendments to the claims filed 01/09/2008, the rejection to the claims under 35 USC § 112 has been withdrawn.

Claim Rejections - 35 USC § 102/103

9. Applicant's arguments, see page 10, filed 01/09/2008, with respect to the rejection(s) of claim(s) 1-3, 5, and 8-14 under US Patent 6207335, Michel et al. have been fully considered and are persuasive in view of the amendments to the claims. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Michel and Saiki as discussed above.

10. Applicant's arguments, see page 11, filed 01/09/2008, with respect to the rejection(s) of claim(s) 7 under US PGPub 2003/0215731, Saiki et al. have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Japanese patent 2003-162145, Saiki et al.

11. Applicant's arguments see page 11, filed 01/09/2008, with respect to the rejection(s) of claim(s) 5 and 6 under US Patent 5360859, Ogawa et al. have been fully

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considered but they are not persuasive. In response to applicant's argument that Ogawa is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Ogawa discloses a similar chemical which is used to control electrical properties. Ogawa is only relied on for a ratio of Mg^{2+} and Al^{3+} , which may already be present in Michel.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rachel L. Burney whose telephone number is (571)272-9802. The examiner can normally be reached on Mon-Thurs: 7:30-6:00 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexa Neckel can be reached on 571-272-1446. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RLB

**/Mark F. Huff/
Supervisory Patent Examiner, Art Unit 1795**